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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,312	12/31/2003	James F. Bobisuthi	01-7195	1793
32681	7590	02/23/2007		
PLANTRONICS, INC. 345 ENCINAL STREET P.O. BOX 635 SANTA CRUZ, CA 95060-0635			EXAMINER ENSEY, BRIAN	
			ART UNIT	PAPER NUMBER
			2615	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/749,312	Applicant(s) BOBISUTHI ET AL.	
	Examiner Brian Ensey	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 11-19 and 28-31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 20 and 23-27 is/are rejected.
- 7) ☒ Claim(s) 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of species 1 claims 1-10 and 20-27 in the reply filed on 11/22/06 is acknowledged.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: See item 108 in Fig. 1 and item 64 in Figs. 4 and 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: Applicant should be consistent in naming element 106 "diaphragm" (See paragraph 2, "diaphragm" is omitted several times following the reference designator).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuminori et al. Japanese Patent Publication 06-339192.

Regarding claim 20, Fuminori discloses a method for adjusting acoustic impedance in a microphone comprising: providing a microphone (1) with a housing (2), a port (3) disposed in the housing leading to an interior chamber (the area of the housing enclosed by the case (2) and the PCB (8)), a first channel from the port to a first side of the diaphragm facing the port (space between the top of the case and the diaphragm (5)), and a second channel from the port to a second side of the diaphragm; receiving a voice signal and a wind noise signal through the port (both acoustic waves and wind will enter the port since there is no windscreen to prevent the wind from entering); propagating the voice signal along the first channel (See Fig. 5 and translation abstract). Fuminori does not expressly disclose propagating the wind noise signal

Art Unit: 2615

along the second channel, wherein the effects of the wind noise signal on the diaphragm are thereby reduced.

Regarding claim 23, Fuminori discloses a microphone with reduced wind noise pickup comprising: a housing (2); a port (3) disposed in the housing leading to an interior chamber; a diaphragm (5) with a first side and a second side, wherein the first side faces the port; a backplate (6); a shunt channel (9a) from the port to the second side of the diaphragm (See Fig. 5 and translation abstract). Fuminori does not expressly disclose the shunt channel receives a wind noise signal to reduce the effects of the wind noise signal on the diaphragm. However, Fuminori provides a second channel around the spacer (4), diaphragm (5) and backplate (6) to the second side of the diaphragm. Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention that providing the same structure will provide the similar benefit of reducing wind noise pickup.

Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuminori as applied to claim 23 above, and further in view of Nakabayashi U.S. Patent No. 6,738,484.

Regarding claim 24, Fuminori further discloses a diaphragm support (4) disposed between the diaphragm and the housing and a transistor (10) coupled to the backplate. (See Fig. 1). Fuminori does not expressly disclose a diaphragm spacer disposed between the diaphragm and the backplate to create a capacitance gap between the diaphragm and the backplate. However, the use of diaphragm spacers is well-known in the art and essential in the functional operation of a capacitance microphone and Nakabayashi teaches a diaphragm spacer (24) between the diaphragm (25) and electret/backplate (22,23) (See Nakabayashi Fig. 6 and col. 1, lines 14-31). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a spacer between the diaphragm and the backplate to create a

Art Unit: 2615

capacitance gap between the diaphragm and the backplate for proper operation of the capacitance microphone (See Nakabayashi Fig. 6 and col. 1, lines 14-31).

Regarding claim 25, the combination of Fuminori in view of Nakabayashi further discloses a printed circuit board (8) coupled to the transistor (See Fuminori Fig. 1 and translation paragraph 0004).

Regarding claim 26, the combination of Fuminori in view of Nakabayashi further discloses an insulating spacer (9) disposed between the printed circuit board (8) and the backplate (6) (See Fuminori Fig. 1 and translation paragraphs 0012-0014).

Regarding claim 27, the combination of Fuminori in view of Nakabayashi further discloses the backplate includes a thru-hole (7) which in part forms the second channel for low frequency components (See Fuminori Fig. 1 and translation paragraphs 0012-0013).

Allowable Subject Matter

Claims 1-10 are allowed.

Claims 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:00 PM.

Art Unit: 2615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, Va. 22313-1450

Or faxed to:

(571) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to:

Customer Service Window
Randolph Building
401 Dulany Street
Arlington, VA 22314

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Brian Ensey
Examiner
February 20, 2007